CONTENTS

Volume 13 Number 1 1987

Special Issue: Scientific Requirements for Antarctic Conservation

Martin V. Angel **W. N. Bonner**	1	Editorial
James H. Zumberge	3	The Scientific Committee on Antarctic Research, the Antarctic Treaty and conservation in Antarctica
William S. Benninghoff	9	The Antarctic ecosystem
John A. Heap	15	The Antarctic Treaty System: Environmental protection, conservation, and the question of competing use
W. Nigel Bonner	19	Antarctic science and conservation— The historical background
G. Hempel	27	BIOMASS
G. Hempel	33	The Krill-dominated pelagic system of the Southern Ocean
Karl-Hermann Kock	37	Marine consumers: Fish and squid
Ray Gambell	47	Whales in the Antarctic ecosystem
J. P. Croxall	55	The status and conservation of Antarctic seals and seabirds: A review
V. A. Gallardo	71	The sublittoral macrofaunal benthos of the Antarctic shelf
D. W. H. Walton	83	Antarctic terrestrial ecosystems
V. R. Smith **R. I. Lewis Smith**	95	The biota and conservation status of sub-Antarctic islands
Martin V. Angel	105	Criteria for protected areas and other conservation measures in the Antarctic region
J. R. Beddington	115	The scientific requirements for the conservation of exploited living marine resources in the Antarctic
R. N. Crockett **P. D. Clarkson**	121	The exploitation of Antarctic minerals
Francisco J. Erize	133	The impact of tourism on the Antarctic environment
W. N. Bonner **M. V. Angel**	137	Conservation and the Antarctic environment: The working group reports of the joint IUCN/SCAR symposium on the scientific requirements for Antarctic conservation
	I	New patents and published patent applications from the United States and over 30 other countries
	XI	Software survey section

CONTENTS

Volume 13 Number 2 1987

A. Alan Moghissi	145	Editorial: Toxic terror
Povl Revsbech **Jens Korsgaard** **Gunnar R. Lundqvist**	147	Suspended particulate matter in dwellings — The impact of tobacco smoking
W. Allan Crawford	151	Environmental tobacco smoke: The use of mathematical models to predict health effects
Olav Hilmar Iversen	155	Cancer risks in relation to other health hazards in a modern society
G. W. Traynor **M. G. Apte** **A. R. Carruthers** **J. F. Dillworth** **D. T. Grimsrud** **W. T. Thompson**	159	Indoor air pollution and inter-room pollutant transport due to unvented kerosene-fired space heaters
John C. Baird **Birgitta Berglund** **Ulf Berglund** **Helene Nicander-Bredberg** **Elliot Noma**	167	Distinguishing between healthy and sick preschools by chemical classification
K. T. Hindy **J. Sievert** **F. Löffler**	175	Influence of cloth structure on operational characteristics of pulse-jet cleaned filter bags
Surya Kanta Sharma **K. V. Sadasivam** **J. M. Dave**	183	DDT degradation by bacteria from activated sludge
P. C. Onianwa **S. O. Ajayi**	191	Heavy metal contents of epiphytic acrocarpous mosses within inhabited sites in southwest Nigeria
G. R. Southworth	197	Movement of radiotracer metal cations through a forest soil column
Oliver J. Hao **C. M. Tsai** **C. P. Huang**	203	The removal of metals and ammonium by natural glauconite
T. D. Lickly **P. G. Murphy**	213	The amount and identity of [^{14}C] residues in bluegills (*Lepomis Macrochirus*) exposed to [^{14}C] triclopyr
M. D. Pednekar **S. R. Gandhi** **M. S. Netrawali**	219	Effect of a single exposure of organophosphorous insecticide, phosalone on sexual life cycle of alga Chlamydomonas Reinhardtii
		Book Reviews
Dixy Lee Ray	225	*On food and cooking*, by Harold McGee

Lucjan Pawlowski 226 *Chemical events in the atmosphere and their impact on the environment: Proceedings of a study week at the Pontifical Academy of Sciences, 7–11 November 1983 (1986)*, edited by G. B. Marini–Bettólo

229 Announcement

I New Patents and published patent applications from the United States and over 30 other countries

XV Software survey section

CONTENTS

Volume 13 Number 3 1987

A. Alan Moghissi 231 Editorial: Who speaks for science?

Mary Anna Bogle
Ralph R. Turner
Charles F. Baes III 235 Lead in vegetation, forest floor, and soils of the Great Smoky Mountains National Park

S. E. Kakulu
O. Osibanjo
S. O. Ajayi 247 Trace metal content of fish and shellfishes of the Niger Delta area of Nigeria

Jen-Men Lo
Ismail I. Esen 253 Physical model study of thermal and chemical pollution in the Shuaiba offshore area of Kuwait

V. Cheam
A. S. Y. Chau 261 Sulfate in colored waters. II. Evaluation of approaches for correcting historical colorimetric data

Paul J. Lioy
Dalia Spektor
George Thurston
Kenneth Citak
Morton Lippmann
Naomi Bock
Frank E. Speizer
Carl Hayes 271 The design considerations for ozone and acid aerosol exposure and health investigations: The Fairview Lake summer camp

I. F. Goldstein
L. R. Andrews 285 Peak exposures to nitrogen dioxide and study design to detect their acute health effects

Bernard L. Cohen
Richard Nason 293 Indoor radon levels in Cumberland, County, PA

299 Books received

I New patents and published patent applications from the United States and over 30 other countries

XIII Software survey section

CONTENTS

Volume 13 Numbers 4/5 1987

A. Alan Moghissi	303	Editorial: Does nature know best?
S. C. Morris **P. D. Moskowitz** **V. M. Fthenakis** **L. D. Hamilton**	305	Chemical emergencies: Evaluation of guidelines for risk identification, assessment, and management
C. T. Garten, Jr.	311	Technetium-99 cycling in deciduous forests: Review and ecosystem model development
Adel A. Mustafa **C. M. Vasisht** **J. Sabol**	323	Measurement of indoor radon concentrations in Kuwait
Ismail M. Madany **S. Mahmood Ali** **M. Salim Akhter**	331	Assessment of lead contamination in Bahrain environment 1: Analysis of household paint
Ibrahim S. Al-Mutaz	335	Automotive emission problem in Saudi Arabia
Peder Skov **Ole Valbjørn** **DISG**	339	The "sick" building syndrome in the office environment: The Danish town hall study
Fritz A. Seiler	351	A methodology for the selection of environmental dispersion models in health risk assessments
T. C. Wang **C. K. Tan**	359	Photodegradation of trichloroethylene in microheterogeneous aqueous systems
R. A. Kango	363	Environmental chemistry of zinc in Himalayan lake sediments
O. S. Fatoki	369	Colorimetric determination of lead in tree leaves as indicators of atmospheric pollution
Charles C. Reith **Carl T. Bishop**	375	A prequalifying program for evaluating the analytical performance of commercial laboratories
		Book Review
H. Keith Florig	383	*Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields National,* National Council on Radiation Protection and Measurements, NCRP Report No. 86 issued April 2, 1986; Bethesda, Maryland
	385	Books Received
	387	Erratum
	389	Announcement
	I	New patents and published patent applications from the United States and over 30 other countries
	V	Software survey section

CONTENTS

Volume 13 Number 6 1987

S. C. Morris	391	Editorial: Book reviews for Environment International
Latifa Al-Houty Hussain Abou-Leila Samir El-Kameesy	393	Nature of gamma rays background radiation in new and old buildings of Qatar University
W. S. Rickert J. C. Robinson N. E. Collishaw	399	A study of the growth and decay of cigarette smoke NOx in ambient air under controlled conditions
A. Arundel T. Sterling J. Weinkam	409	Never smoker lung cancer risks from exposure to particulate tobacco smoke
W. Schimmack K. Bunzl H. Bachhuber	427	Variability of the sorption of Cs, Zn, Sr, Co, Cd, Ce, Ru, Tc and I at trace concentrations by a forest soil along a transect
Wuncheng Wang	437	Factors affecting metal toxicity to (and accumulation by) aquatic organisms — overview
Fritz A. Seiler	459	Analysis of health or systemic effects caused by two toxicants
C. C. Travis S. Richter Pack A. Fisher	469	Cost-effectiveness as a factor in cancer risk management
Mark E. Churchwell Robert L. Livingston Donald L. Sgontz Jerry D. Messman Werner F. Beckert	475	Single-laboratory evaluation and modification of U.S. EPA methods 7470 and 7471 for the determination of mercury in aqueous and solid hazardous wastes
C. M. A. Ademoroti	491	Contamination of shallow wells in Nigeria from surface contaminant migration
C. P. Huang K. P. Kehrer O. J. Hao	497	Enhanced and inhibitory effects of mineral particulates on the utilization of glycine by *Pseudomonas* species
	505	Books Received
	I	New patents and published patent applications from the United States and over 30 other countries
	VII	Software survey section
	XI	List of contents and author index, Volume 13, 1987

ENVIRONMENT INTERNATIONAL

AUTHOR INDEX, VOLUME 13, 1987

Abou-Leila, Hussain, 393
Ademoroti, C. M. A., 491
Ajayi, S. O., 191, 247
Akhter, M. Salim, 331
Al-Houty, Latifa, 393
Al-Mutaz, Ibrahim S., 335
Ali, Mahmood S., 331
Andrews, L. R., 285
Angel, Martin V., 1, 105, 137
Apte, M. G., 159
Arundel, A., 409

Bachhuber, H., 427
Baes, Charles F., III, 235
Baird, John C., 167
Beckert, Werner F., 475
Beddington, J. R., 115
Benninghoff, William S., 9
Berglund, Birgitta, 167
Berglund, Ulf, 167
Bishop, Carl T., 375
Bock, Naomi, 271
Bogle, Mary Anna, 235
Bonner, W. N., 1, 19, 137
Bunzl, K., 427

Carruthers, A. R., 159
Chau, A. S. Y., 261
Cheam, V., 261
Churchwell, Mark E., 475
Citak, Kenneth, 271
Clarkson, P. D., 121
Cohen, Bernard L., 293
Crawford, W. Allan, 151
Crockett, R. N., 121
Croxall, J. P., 55

Dave, J. M., 183
Dillworth, J. F., 159

El-Kameesy, Samir, 393
Erize, Francisco J., 133
Esen, Ismail I., 253

Fatoki, O. S., 369
Fisher, A., 469
Florig, H. Keith, 383
Fthenakis, V. M., 305

Gallardo, V. A., 71
Gambell, Ray, 47
Gandhi, S. R., 219
Garten, C. T., Jr., 311
Goldstein, I. F., 285
Grimsrud, D. T., 159

Hamilton, L. D., 305
Hao, O. J., 203, 497
Hayes, Carl, 271
Heap, John A., 15
Hempel, G., 27, 33
Hindy, K. T., 175
Huang, C. P., 203, 497

Iversen, Olav Hilmar, 155

Kakulu, S. E., 247
Kango, R. A., 363
Kehrer, K. P., 497
Kock, Karl-Hermann, 37
Korsgaard, Jens, 147

Lewis Smith, R. I., 95
Lickly, T. D., 213
Lioy, Paul J., 271
Lippmann, Morton, 271
Livingston, Robert L., 475
Lo, Jen-Men, 253
Löffler, F., 175
Lundqvist, Gunnar R., 147

Madany, Ismail M., 331
Moghissi, A. Alan, 145, 231, 303
Morris, S. C., 305, 391
Moskowitz, P. D., 305
Murphy, P. G., 213
Mustafa, Adel A., 323

Nason, Richard, 293
Netrawali, M. S., 219
Nicander-Bredberg, Helene, 167
Noma, Elliot, 167

Onianwa, P. C., 191
Osibanjo, O., 247

Pawlowski, Lucjan, 226
Pednekar, M. D., 219

Ray, Dixy Lee, 225
Reith, Charles C., 375
Revsbech, Povl, 147
Richter Pack, S., 469

Sabol, J., 323
Sadasivam, K. V., 183
Schimmack, W., 427
Seiler, Fritz A., 351, 459
Sgontz, Donald L., 475
Sharma, Surya Kanta, 183
Sievert, J., 175
Skov, Peder, 339
Smith, V. R., 95
Southworth, G. R., 197
Speizer, Frank E., 271
Spektor, Dalia, 271
Sterling, T., 409

Tan, C. K., 359
Thompson, W. T., 159
Thurston, George, 271
Travis, C. C., 469
Traynor, G. W., 159
Tsai, C. M., 203
Turner, Ralph R., 235

Valbjørn, Ole, 339
Vasisht, C. M., 323

Walton, D. W. H., 83
Wang, T. C., 359
Wang, Wuncheng, 437
Weinkam, J., 409

Zumberge, James H., 3